THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A compound of formula I or II:

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in which

R¹ is an N-protecting group or a peptide; R² is CHCH₃OAc or CHR⁵R⁶ in which R⁵ is hydrogen

and
$$R^6$$
 is OAc, $CONH_2$, SBn , CH_2 S—O , CHO

Me

$$_{25}$$
 $\stackrel{\text{HO}_2\text{C}}{\sim}$ $_{\text{NH}_2}$, $_{\text{CN}}$ $\stackrel{\text{Me}}{\sim}$, $_{\text{N}}$ $\stackrel{\text{N}}{\sim}$ $\stackrel{\text{N}}{\sim}$ $\stackrel{\text{N}}{\sim}$ $\stackrel{\text{N}}{\sim}$ $\stackrel{\text{N}}{\sim}$ $\stackrel{\text{N}}{\sim}$ $\stackrel{\text{N}}{\sim}$

$$30 ext{ HO}_2C$$
 O_2H O_2C O_2H O_2C O_2

 $\mathcal{L}_{\mathbf{k}}$

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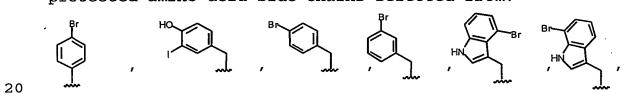
 CO_2R^7 or $CH_2CO_2R^7$ in which R^7 is a carboxyl protecting group; and

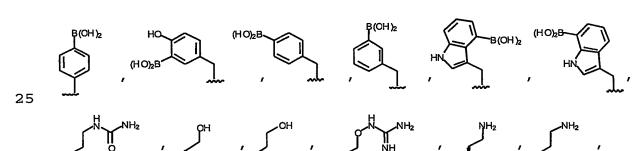
$$R^3$$
 is CHCH $_3$ OAc, — , — $\Big\rangle$

or CHR^5R^6 in which R^5 is as defined above and R^6 is OAc, SBn, CONHTrt,

10 CO_2R^7 , $CHCO_2R^7$, CH_2CH_3 or $CH=CH_2$ in which R^7 is as defined above, R^8 is a histidine protecting group and R^9 is a phenol protecting group;

R⁴ is hydrogen or R⁴ is methyl when R³ is OAc;
R³ together with R⁴ forms cyclopentyl; or
R² and R³ independently represent optionally
protected amino acid side chains selected from:





$$HO_2C$$
 HO_2C
 HO_2C

salts, hydrates, solvates, derivatives, tautomers and/or isomers thereof.

2. A compound according to claim 1, which is selected from:

CO₂Troc CO₂Troc CO₂Troc
$$R^1$$
 R^1 CO_2H R^1 R^1 R^2 R^2 R^3 R^4 $R^$

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10 in which R^1 is as defined in claim 1.

- A process for preparing the compound of formula
 I as defined in claim 1 or claim 2 which comprises
 reductive cleavage of the compound of formula II as defined in claim 1 or claim 2.
- 4. A process according to claim 3 in which the reductive cleavage employs trifluoroacetic acid (TFA) as the acid and triethylsilane (Et₃SiH) as the reductant.
 - 5. A process for preparing the compound of formula I or II as defined in claim 1 or claim 2 when

 R^1 is an N-protecting group or a peptide; R^2 is $CHCH_3OAc$ or CHR^5R^6 in which R^5 is hydrogen

and R⁶ is OAc, CONH₂, SBn, CH₂S O , Me

$$N - R^8$$
, $N - R^8$,

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$$_{5}$$
 $_{NH_{2}}$ $_{CN}$ $_{N-Me}$

 CO_2R^7 or $CH_2CO_2R^7$ in which R^7 is a carboxyl protecting group; and

 R^3 is CHCH₃OAc, — ()

or CHR^5R^6 in which R^5 is as defined above and R^6 is OAc, SBn, CONHTrt,

SBn, CONHTrt, N-R⁸, OR⁹

 CO_2R^7 , $CHCO_2R^7$, CH_2CH_3 or $CH=CH_2$ in which R^7 is as defined above, R^8 is a histidine protecting group and R^9 is a phenol protecting group;

 R^4 is hydrogen or R^4 is methyl when R^3 is OAc; R³ together with R^4 forms cyclopentyl;

which comprises the steps of:

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converting a compound of formula III (a)

$$H_2N$$
— CH — CO_2H

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III

in which

 R^2 is CHOHMe or CHR^5R^6 in which R^5 is as defined above and R_a^6 is OH, SH, CONH₂,

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in which R^8 is as defined above, 15

-Me HO₂C

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CO2H or CH2CONH2

or salts thereof 30

H₂N

CO₂H

into a compound of formula IV

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IV

in which

R1b is an N-protecting group;

 R^2_b is CHOAcMe or CHR $^5R^6_b$ in which R^5 is as defined above and R^6_b is OAc, SBn, SMe, CONHR 1_b in which R^1_b is as defined above, CHO N_{-R}^{8} , N_{-R}^{8} ,

5 N

HO₂C HN Me
NH₂ S S
NH₂

20 CO₂H or CH₂CO₂H;

- (b) oxazolidination of the compound of formula IV to form the compound of formula II; and
- (c) reductive cleavage of the compound of formula II to form the compound of formula I.

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6. A process according to claim 5, in which the conversion step (a) results in the protection of the amino group on the compound of formula III to produce the compound of formula IV.

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- 7. A process according to claim 5 or claim 6, in which the oxazolidination step (b) uses a formaldehyde source in an organic solvent.
- 35 8. A process according to claim 7, in which the formaldehyde source is paraformaldehyde and paratoluenesulphonic acid (TsOH).

- 9. A process according to claim 7 or claim 8, in which the organic solvent is benzene or toluene.
- 5 10. Use of the compound of formula I or II defined in claim 1 or claim 2 in the synthesis of peptides.
 - 11. A peptide which includes the compound of formula I or II as defined in claim 1 or claim 2.
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 12. A peptide according to claim 11, which is a dipeptide.
- 13. A peptide according to claim 12, in which the dipeptide is of the formula V

in which

 R^1 and R^2 are as defined in claim 1 or claim 2, R' is an optionally protected amino acid side chain and R is H or a carboxyl-protecting group.

V

- 14. A kit for use in synthesising peptides which comprises
- (a) at least one compound of formula I or 30 formula II as defined in claim 1 or claim 2 or peptide as defined in any one of claims 11 to 13; and
 - (b) optionally at least one other N-methyl amino acid, its precursor oxazolidinones, an optionally substituted amino acid, or protected forms thereof,
- said compounds, N-methyl amino acids, oxazolidinones and/or amino acids being held separately.